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ABSTRACT

Dental hygiene students' perceptions of themselves and the "typical dental hygienist" were assessed in relation to feminist attitudes at Old Dominion University, Norfolk, Virginia, and the University of Minnesota, Minneapolis. Dempewolff's (1972) 56-item Feminism II Scale was administered to all first-year, second-year, and post-certificate dental hygiene students. The scale covers political, intellectual, and economic spheres and focuses on questions of competence, privileges, responsibilities, and leadership for women. Data gathered on perceptions of self and the typical dental hygienist were analyzed using 3x3x3 factorial repeated measures analysis of variance, which also assessed interactions among the variables of educational level, grade point average, and age. For the 198 students, no significant differences were found for the independent variables of age, level, or grades. It is suggested that female dental hygiene students are inclined toward opposition of the feminist movement. It is proposed that dental hygiene curricula are not enhancing dental hygiene students' feminist attitudes, curricula should incorporate women's studies courses and consciousness raising, and dental hygiene educators should assess their feminist attitudes in order to serve as effective role models. A literature review and research recommendations are included. A bibliography and sample Feminism II Scale are appended. (SW)

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ABSTRACT

DENTAL HYGIENE STUDENTS' PERCEPTIONS OF THEMSELVES AND THEIR PROFESSIONAL ROLE IN REGARD TO FEMINISM

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The purpose of this investigation was to assess dental hygiene students' perceptions of themselves and the "typical dental hygienist" in regard to feminism. The accessible population was composed of all first-year, second-year, and post-certificate dental hygiene students at Old Dominion University, Norfolk, Virginia, and the University of Minnesota, Minneapolis, Minnesota.

Data were organized according to a 3x3x3 factorial research design with age, Q.P.A., and educational level as the assigned independent variables. The dependent variable, students' perceptions of themselves and the "typical dental hygienist," was measured by the Feminism II Scale.

Repeated measures analysis of variance yielded no statistically significant difference between dental hygiene students' perception of themselves and students' perception of the "typical dental hygienist." Additionally, no statistically significant interaction was observed among educational levels, age groups, and Q.P.A. groups as

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measured by Feminism II scores. All comparisons were at the 0.05 level of significance.

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Chapter 1

INTRODUCTION

"Women have been defined in their role by the relationship to men in power instead of in relationship to the responsibilities they hold and services they perform for the health and welfare of the public."[8] This statement holds true for the dental hygiene profession. When dental hygiene was first created by the dental profession, the dental hygienist was labeled as a dental auxiliary since the dental hygienist was considered to be another aid of the dentist. Because dental hygiene was a subsidiary of the dental profession and wages were to be drastically lower than the dentist's, it was assumed that dental hygiene would be a female occupation, since after all, women were to occupy subordinate roles to men. Today dental hygienists are still often looked upon as dentists' helpers rather than as professionals who directly provide oral health services to a client. Even though dentists receive limited prophylactic training in school, it is thought that the dentist maintains superior capability for performing dental hygiene services.[37] The dental hygiene profession is not considered by many to be an autonomous profession since control over dental hygiene is still retained by the dental profession through state dental laws and by the nature of

the private dental practice. A sense of lack of control over one's profession may be a reason for the high attrition rate among dental hygienists.[45]

There is a strong relationship between a woman's concept of the female role and her educational and occupational aspirations.[21,43] If the concept of dental hygiene as an independent health profession is accepted by the dental profession and the basic goals of the feminist movement are instilled in dental hygiene students, it is hypothesized that the dental hygiene profession may (1) work to replace the subordinate/superordinate relationship of the dental hygienist and dentist with "a more adult interdependent relationship that is based on the recognition of and respect for achieved levels of competence"[8] and (2) elicit recognition that although differences in education and skills exist between the dentist and dental hygienist, dental hygiene is complementary, not subordinate to dentistry.

If a woman's concept of the female role affects educational and occupational aspirations, then the assessment of students' attitudes toward feminism is necessary for the upgrading and expansion of the dental hygiene profession. Attitudes toward feminism have been explored in psychology, medicine, nursing, and dentistry. No investigations, however, could be found relating feminism to the dental hygiene student. If a positive attitude toward feminism is thought to be important for the upgrading and expansion of the dental hygiene profession, then further feminism research in dental hygiene is needed.

Statement of the Problem

The questions addressed were:

1. Is there a difference among the feminist attitudes of first-year, second-year, and post-certificate dental hygiene students as measured by their scores for "self" and the "typical dental hygienist"?

2. Is there a difference between how dental hygiene students perceive themselves and the "typical dental hygienist" in regard to feminism as measured by the Feminism II Scale?

3. What effects do Q.P.A., age, and educational level have on dental hygiene students' perceptions of themselves and the "typical dental hygienist"?

4. Are dental hygiene students supporters or non-supporters of the feminist movement as measured by their scores on the Feminism II Scale?

Significance of the Study

"The traditional image of women in dentistry has been one of the able chairside assistant supporting and helping the dedicated successful dentist."[8] The roles of the dental hygienist and dental assistant have traditionally been carried out by women. Throughout the history of western culture, lower status, lower pay, and a "helpee" role in the labor force has been synonymous with "women." When dental hygienists were first introduced to dental private practice, the relationship of the dental hygienist

and dentist assumed a characteristic subordinate/superordinate pattern, since after all, most dental hygienists were, and still are, women.[9] Although the dental hygienist has responsibility for direct client care and is usually the person of the dental team most often seen by clients, the dentist maintains the power to govern all services rendered in the dental office.

In order to honestly study the subordinate/superordinate behavior found between the dental hygienist and dentist, one must focus on the term "power." The traditional definition of power suggests control of one group by another, and hence, when a subordinate group begins to discuss power, the dominant group may begin to fear insurrection.[17] Consider the above definition of power in terms of male-female relationships; in our society it is felt that women, being inferior to men, detract, except for their physical attractiveness, rather than add to the prestige of the occupational position.[14] Generally speaking, men cannot validate their self worth when women share the responsibilities and prestige of their occupation. Consequently, men view women as a threat to their power. This is eminently seen in private dental practices. Because it is almost universally true in our culture, in this discussion we will assume that the dentist is male and the dental hygienist is female. Since the dentist owns the practice, he is the employer and the dental hygienist, dental assistant and other personnel are employees. Hours,

schedules, compensation, and services to be rendered are all controlled by the dentist. A subservient role is assumed by the dental hygienist; what she can or cannot do is dictated to her by the dentist. Soon the dental hygienist discovers that her role is one of pleasing the dentist and finds herself compromising her own profession to do so. For example, many times the dental hygienist cannot deliver comprehensive oral health services because of the short time allotted for each dental hygiene client. A dental hygienist is educated to perform many more oral health services in school than she is allowed to use in private practice. These services that a dental hygienist is competent to perform are not utilized in private practice for such reasons as: (1) finances; the less time allotted for each client, the more clients are seen, consequently more money is made; (2) fear of losing power; the dentist does not want the hygienist invading "his turf" by performing services he feels only he has the expertise to provide; (3) fear of losing confidence in the eyes of the client; the client may feel that the dentist is no longer indispensable and that the dental hygienist is sometimes the only person s-he needs to see for routine care, and (4) state dental laws which govern dental hygiene practice.

Control over duties which dental hygienists can perform is reinforced by the laws of dentistry. For example, this collective control can be seen in State Dental Practice Acts which specifically cite what services

a dental hygienist may or may not perform. Power in the dental profession continues to be based on the concept of power as a finite quantity of control that one person or group exercises over another person or group.[16] "If a husband has power, theoretically a wife does not; if the leader of a group is powerful, theoretically, the members of that group must be without power."[16] Such conception of power extends itself deeply into all aspects of society.

Women and power have generally been discussed in a framework that insists upon a competitive struggle with men. Some women feel that if they have power they are taking it away from men. "Mothers and female elementary school teachers have said that if you raise girls' self esteem, you will necessarily threaten the boys'."[16] Again, the assumptions are drawn from the traditional view of power as a finite quantity that some, and not others, possess. According to that view, power becomes the object of a struggle to gain and hold superiority. Indeed a change of power in this sense, changes nothing, since power, the exercise of control by one group over the other, "continues under a different face."[16] Wollstonecraft[42] clarifies what our attitude should be: "I do not want women to have power over men, but over themselves." Women do not want "men's turf" or their power, they simply want the freedom to develop their potential, whatever that may be. By analyzing power relationships and redefining the nature of power and of women, the growing feminist movement has

helped women discover their own powers, or "woman power," and improve their self concepts. Dental hygiene educators must participate in consciousness raising and seek to instill in dental hygiene students the basic aims of the feminist movement so that the professional independence of dental hygiene may be gained.

Although changing attitudes of dental hygienists is a beginning, it is only that. If the dental hygienist is ever to be recognized as an autonomous oral health professional, s-he must have the freedom to work outside of the traditional dental practice independent of the dentist. As long as dental hygienists are prohibited by law to work outside of private dental practice, dental hygiene cannot be recognized as a true profession since control over dental hygiene will remain with the dental profession. Dental hygienists must look to alternative practice settings. An alternative practice may mean one of the following:

1. A hygienist working under the general supervision of a dentist in an independent office.

2. A group practice for several dental hygienists affiliated with one or more dentists to whom referrals are made.

3. Independently-owned dental hygiene practice in which the dental hygienist works alone or employs other hygienists.

4. Dental hygienists working in community practice

settings, e.g., schools, hospitals, extended care facilities, or remote areas.

In any case, elimination of the employer/employee relationship between the dentist and dental hygienist will be achieved. In alternative practice settings dental hygienists will be able to fully obtain professional independence and power and maximize their potential as oral health professionals, thereby rendering more comprehensive care to wider populations. All dental hygienists perhaps will not choose to work in an alternative practice setting. Whether or not all dental hygienists should work in alternative practice settings is not the issue. At present, dental hygienists do not have the legal freedom to choose between the traditional and the alternative practice setting. Until dental hygienists have this freedom, professional independence will not be recognized.

Dental hygiene cannot achieve this independence and power on its own. Cooperation between the dental hygiene profession and the dental profession is mandatory. Only through working together to change laws, practice settings, and attitudes will an egalitarian relationship be established. Therefore, not only must dental hygienists be educated but dentists also. Dental hygiene professionals, however, must lead the way to change. Unless dental hygienists take action and lead dentistry in pursuing an adult interdependent relationship between dentist and dental hygienist, change will never take place and large

segments of the population will continue to be deprived of adequate oral health care.

This study reveals dental hygiene students' perceptions of themselves and their professional role. The scope of this study might raise consciousness about "woman power" in the dental hygiene profession. Analysis of the current work and status of dental hygiene, as in the case of nursing recently, might lead to an awareness that the dental hygiene profession needs redefinition by the members themselves. Lastly, it might encourage the sharing of power between the dental hygiene and dental professions so that an egalitarian relationship may evolve.

Definition of Terms

Dental hygienist--"A licensed, professional, oral health educator and clinical operator who uses preventive, therapeutic, and educational methods for the control of oral diseases."[41]

Typical dental hygienist--The designation used as a neutral descriptional phrase in an effort to avoid prejudging responses. In this study, the typical dental hygienist referred to those persons conforming to the essential features of the dental hygienist; that being characteristically a person certified in dental hygiene, and employed in a private dental practice. The subjects' feminist attitudes toward the "typical dental hygienist" were assessed in the Feminism II Scale.

First-year dental hygiene students--Those students in their first of two years of a dental hygiene curriculum. This was an assigned independent variable in the study.

Second-year dental hygiene students--Those students in their second of two years of a dental hygiene curriculum. This was an assigned independent variable in the study.

Post-certificate dental hygiene students--Those students who have their Dental Hygiene Certificate but are continuing school to obtain their Bachelor of Science in Dental Hygiene degree. This was an assigned independent variable in the study.

Feminist movement--There are various theories and analyses within feminism. Feminist groups differ on the cause of inequality between men and women, the degree of what is wrong with society at present, and the solutions to these problems. However, all groups of feminists agree that the status of women should be improved. The feminist movement is a cultural phenomenon in that all women actively pursuing improvement in the status of women may be viewed as participants.

Feminism--The philosophy and the cultural phenomenon of the feminist movement--a movement committed to achieving full and equal participation of women in all aspects of society, and the equalization of power in a society in which exploitation and discrimination no longer exists.

Feminist attitudes--Attitudes that are consistent with the women's movement as measured by the Feminism II Scale.

Qualitative grade point average (Q.P.A.)--Cumulative grade point average based on a 4.0 scale. A numerical measure of academic achievement in college. In the study the dental hygiene students were grouped into the following categories: 3.60-4.00, 3.00-3.59, and 2.00-2.90.

Assumptions

For the purposes of this study, the following assumptions were made:

1. Attitudes toward feminism can be validly and reliably measured by the Feminism II Scale.[10,11,12]

2. The subjects will answer the questionnaire honestly and accurately.

3. Response to the Feminism II Scale will accurately reflect dental hygiene students' perception of themselves and the "typical dental hygienist" in regard to feminism.

4. Available literature on dental hygiene and the feminist movement can be appropriately applied to this study.

Limitations

The following are limitations in the study:

1. The sample is an intact group; therefore, the generalizations of the study's results are limited.

2. Sample selection bias may threaten the validity of the results. Students have been in an ideal environment,

that is, within a group of dental hygiene students under the supervision of licensed dental hygienists. Had the students had experience working in private practice under direct supervision of a dentist, scores might have been different. In addition, subjects' scores might be affected by their dental hygiene faculty's feminist attitudes.

Hypotheses

The null hypotheses tested were:

1. There is no statistically significant difference at the 0.05 level between students' perception of themselves and students' perception of the "typical dental hygienist" as measured by the Feminism II Scale.

2. In students' perception of themselves, there are no statistically significant differences, overall, at the 0.05 level, for age groups, Q.P.A. groups, and educational levels, as measured by the Feminism II Scale (main effects and interaction together).

3. In students' perception of the "typical dental hygienist," there are no statistically significant differences, overall, at the 0.05 level, for age groups, Q.P.A. groups, and educational levels as measured by the Feminism II Scale (main effects and interaction together).

4. There is no statistically significant difference at the 0.05 level in scores for "self" between first-year, second-year, and post-certificate dental hygiene students as measured by the Feminism II Scale.

5. There is no statistically significant difference at the 0.05 level in scores for the "typical dental hygienist" between first-year, second-year, and post-certificate dental hygiene students as measured by the Feminism II Scale.

Methodology

Dempewolff's 56-item Feminism II Scale[12] was administered to all first-year, second-year, and post-certificate dental hygiene students at Old Dominion University and the University of Minnesota. The scale was used to survey dental hygiene students' perceptions of themselves and the "typical dental hygienist" in regard to feminism (see Appendix A). The assigned independent variables, Q.P.A., age, and educational level, were determined by the basic information questionnaire. Data were organized using a 3x3x3 factorial research design using Feminism II scores as the dependent variable. A repeated measures analysis of variance was employed for data analysis.

Chapter 2

REVIEW OF THE LITERATURE

The construct, feminist attitudes, has been studied in various populations. A review of the literature regarding the socialization of women, the nature of dental hygiene, dental hygiene education, and the values of dental hygienists revealed findings significant to the study of feminist attitudes in dental hygiene students.

Socialization of Women

The socialization of women is thought to be at the root of the differentiation in status experienced by males and females. American women are dissuaded from showing independence and intellectual originality.[3] Instead they have been encouraged to become homemakers who adapt and live through the achievements of their husbands and children.[3] Assumptions current today about woman's alleged "nature" are disguised psychological versions of physiological premises in the Old Testament, in the doctrines of the early church fathers, and in the thinking of male philosophers, writers, and educators.[16] Men have become the definers of the nature of manliness and womanliness.[20] In this male-made system, strength, assertiveness, and aggression became male qualities; delicacy, weakness,

passivity, and gentleness became exclusively female qualities.[20] Cultural pressures have often forced women to these "norms" and women have been "punished" when they did not conform to the rules.[20]

A sex-role questionnaire was obtained from 599 men and 313 women. It was found that men and masculine characteristics were more highly valued in our society than feminine characteristics. The distinctions between male-valued and female-valued components of the sex-role stereotypes had important implications for the self-concepts of men and women. Women tended to incorporate negative aspects of feminity (relative incompetence, irrationality, passivity, etc.) into their self-concepts as well as positive aspects (warmth and expressiveness). The college population males considered 40 percent of the desirable feminine characteristics also important for men but felt that it was desirable for women to have the negative aspects of femininity. The finding that sex-role stereotypes continue to be held by large and relatively varied samples of the population and furthermore are incorporated into the self-concepts of both men and women indicates how deeply ingrained these attitudes are in our society.[28]

A survey conducted by Austin[4] attempted to determine whether or how much women dental students felt their educational experience had been affected by the fact that they were women. The survey results indicated that most women did not find overt discrimination in their educational

experience. Yet, it is precisely the belief that women will be discriminated against and not accepted that is encouraging the lack of qualified applicants to dental schools. The dilemma in the minds of most women becomes one of either choosing femininity and security or choosing masculinity and self esteem.[28] Women have been counseled away from male dominated professions by those advisors who still urge women to pursue "less demanding careers."[4] Martin and Simpson[23] found that among the nurse population surveyed, characteristics consistent with the female sex role were prominently associated with their subjects' decision to enter nursing.

The Nature of Dental Hygiene

"The role and status of the dental hygienist is determined and defined in terms of the dentist she works for."[8] The oral health services rendered to the public by dental hygienists many times do not reflect an expertise unique to the profession of dental hygiene but rather those services which the dental profession has seen fit to delegate to an individual with lesser educational credentials.[37] Lack of time on the part of the dentist, rather than the qualifications on the part of the hygienist, have constituted the factor determining role identity.[37] A study by the Department of Health, Education and Welfare[30] on the participation of women in the health care industry labor force revealed that although dental hygienists and dentists

are characterized by overlapping responsibility for client care, these professions are at drastically different levels of professional status. The dental hygiene profession is not recognized as an autonomous profession, but rather as a sub-profession of dentistry. Dental hygienists maintain a strong sense of pride in their work but are frustrated by their lack of control over their profession.[30] HEW's study also found that among the population surveyed, factors consistent with the female sex role were associated with their subjects' decision to enter dental hygiene and other traditionally female occupations. Women who eventually elected dental hygiene had often been encouraged to do so on the grounds that such work might lead to a desirable marriage in that one may easily leave and return to practice.[30]

Young and Striffler[44] stated that the growth and development of the dental hygiene profession are dependent on the dentist's recognition of a hygienist's value and not the public's demand for care. However, a study by McAdams[25] revealed that dental students did not know the capabilities and responsibilities of dental hygienists, education and clinical requirements for hygienists, or state laws governing them.

Several empirical studies have been designed to establish the relationship between nursing and feminist beliefs. Longitudinal research by Davis[9] of students in a baccalaureate nursing program showed an overall picture of

nursing students as "conventionally oriented" young women, much more heavily interested in traditionally feminine life goals than in career pursuits and reluctant to make more than incidental concessions to professional involvement. Decker[11] compared female baccalaureate nursing and non-nursing students in a large university setting, using Dempewolff's Feminism II Scale.[12] The study revealed that more non-nursing than nursing students could be classified as "supporters" of the feminist movement. Decker also found that both nursing and non-nursing students perceived the typical nurse as adhering to significantly more traditional sex role values than these nursing students identified for themselves. This finding indicated a stereotyping of the "typical nurse" supporting a traditionally female orientation. A similar study was conducted by Decker, Moore, and Dowd in 1978[10] to determine if successive educational levels of nursing affected feminist attitudes held by the nursing students and non-nursing students. Nursing participants were students in a baccalaureate program with an integrated curriculum and a philosophy that supported independent learning. Non-nursing students were those enrolled in other programs at the same university. The tool used for the study was the 56-item Feminism II Scale,[12] developed by Dempewolff. A significant difference was found in the view of self and typical nurse for female nursing students, the nurses showing more feminist leanings as they progressed in school. Male

nurses, non-nurses, and females in typical and atypical female majors rated themselves lower than female nurses on one feminist scale. A similar study of dental hygiene students is needed to determine their perceptions of themselves and the "typical dental hygienist" within feminist philosophy.

Dental Hygiene Education

The traditional male-female relationship between dental hygienists and dentists like that of physicians and nurses has been entrenched in both the educational and health care systems. When the progress of dental hygiene is compared with the progress of other health professions over the last seventy years, dental hygiene is cited to be progressing slowly toward professional independence.[29]

Dental hygiene education must seek to instill the attitude of professional independence in the student.[5,29] If the dental hygiene profession wishes to be recognized as a true profession and not a sub-profession of dentistry, dental hygienists must believe that they are oral health professionals and not simply dentists' helpers. Dental hygiene educators must assume the responsibility as prime professional role models. If dental hygiene educators demonstrate professional behavior, intelligence, independence, and self-direction, the students' as well as the society's view of the dental hygiene profession will be consistently upgraded and the recognition of dental hygiene

as a profession will insue. A positive attitude toward feminism by dental hygienists is thought to be important for the upgrading and expansion of the professional role of the dental hygienist. The proposed research may encourage the dental hygiene profession to prepare and sustain dental hygienists who identify with the feminist movement so that an identity for dental hygienists and a consciousness of the value of their knowledge, skills, and judgment may develop.[8]

No other profession is denied the right to control its own educational process.[42] While the dental hygiene profession does have some input into the establishment of educational criteria for dental hygiene programs, the dental profession reserves for itself the right of judgment by means of its accreditation process.[5] While it is recognized that state dental practice acts may differ in the degree of restriction, complete control is retained by the dental profession.

Aspirations of a profession must begin in educational programs. Dental hygiene educators could incorporate the principles of the feminist movement into curricula to develop a healthy professional self image for students. In a study by Tipton,[40] women with contemporary, profeminist attitudes toward the role of women were found to have interest patterns similar to what has been referred to as career-oriented women. When nurses or women healers in the past made their best advances, it was in relationship

to a strong feminist movement.[33] Strong leadership is needed--leadership from women who know who they are, not simply as dental hygienists, but as women.[33] The proposed study would determine if students' attitudes toward self and the "typical dental hygienist" adhere to more traditional sex role values or if students have a more contemporary, profeminist view of themselves and their profession.

Values of Dental Hygienists

Rosenberg[35] and Merton[26] speculate that individuals choose a value because it is representative of the occupation they expect to enter. To support this assumption, Lipman-Blumen[21] conducted a series of studies involving women health professionals to identify correlates of feminist values. Lipman-Blumen found a strong relationship between a woman's concept of the female role and her educational aspirations.[21] Studies conducted by Worrell and Worrell[43] and Dempewolff[12] revealed that supporters of the feminist movement scored higher than opposers of the feminist movement on measures of internal control, independence, and autonomy. If feminist values were held by dental hygienists, would society's perception of the dental hygienist change? If dental hygienists hold feminist values it is hypothesized that dental hygiene recruitment might be affected, in that persons with similar values would choose to enter the profession, thus determining the future direction of the profession.[9,37,43]

Few studies have been done on the values held by dental hygienists. Sakumura[36] studied second year dental hygiene students and faculty at the University of Missouri-Kansas City. The instrument used was Rokeach's Value Survey.[34] The Value Survey identifies life values of dental hygienists. The subject is asked to rank-order the two sets of values from most important to least important. Sakumura found no statistically significant difference between the two groups. Both groups rated the terminal values of happiness, inner-harmony, family security, mature love and self-respect in the top five. A study by Koot and Darby[19] investigated values of dental hygienists in three occupational settings: private practice, community practice, and higher education, and found no significant value differences among the three groups. Dental hygienists' scores were also compared with scores of college females, nursing students, dental students and faculty, and female medical students. Significant value differences were revealed between dental hygienists and the other four groups. The study suggested that dental hygienists consider economics in choosing a career more than other related health professionals. In addition, dental hygienists do not seem to have a great interest in scholarship, creativity, or intellectual pursuits, characteristics which are essential for research and leadership positions in the field.[19] Redman[31] stated that, "[d]ifferentiation of those personality characteristics and values most compatible with

roles in nursing and the provision of environments conducive to the nurturing of these characteristics . . ." is an important goal of nursing education. Knowledge of the values of dental hygienists might provide valuable information to dental hygiene educators, guidance counselors, and the profession in general, since vocational choice, job satisfaction, and human behavior are related to personal values.[19]

Summary

Research studies assessing feminist attitudes held by health professionals have been investigated. The literature reveals descriptive research supporting the following:

1. A discipline composed mainly of women usually has low status.

2. Women ascribing to the aims of the feminist movement are more independent, autonomous, and internally controlled.

3. A positive attitude toward feminism is thought to be important for the upgrading and expansion of female-dominated professions.

The present study assessed dental hygiene students' perceptions of themselves and the "typical dental hygienist" in regard to feminism. This information might influence advancement and change in dental hygiene as it reveals feminist attitudes of dental hygiene students.

Chapter 3

METHODS AND MATERIALS

First-year, second-year, and post-certificate dental hygiene students in the dental hygiene programs at Old Dominion University, Norfolk, Virginia, and the University of Minnesota, Minneapolis, Minnesota, for the 1979-80 academic school year participated in the investigation. Each student was administered the Feminism II Scale designed by Dempewolff[12] to survey the students' perceptions of themselves and the "typical dental hygienist" in regard to feminism.

Sample Description

The target population was composed of 198 first-year, second-year, and post-certificate dental hygiene students at Old Dominion University and the University of Minnesota (see Figure 1). The population was chosen because of the

	University of Minnesota	Old Dominion University
First-Year	45	25
Second-Year	71	36
Post-Certificate	12	9
Totals	128	70

Figure 1. Profile of Sample Population

convenience and accessibility to the researcher. All respondents were female. The Feminism II Scale was administered to the students within a two-week time period. Relevant variables in this study were Q.P.A., age, and educational level. Interaction of the relevant variables Q.P.A., educational level, and age with the subjects' perception of themselves and the "typical dental hygienist" were analyzed using a repeated measures analysis of variance.

Research Design

The assigned independent variables in the study were age, Q.P.A., and educational level. Each of these variables was divided into three levels: (1) age: 18-22, 23-29, >-30; (2) Q.P.A.: 2.00-2.90, 3.00-3.59, 3.60-4.00, and (3) educational level: first-year, second-year, and post-certificate. The dependent variable was the students' perception of themselves and the "typical dental hygienist." A repeated measures, 3x3x3 factorial design was used to study the main effect of each variable and the interaction effect of these variables on the dependent variable as well as the effects due to interaction among the assigned independent variables, Q.P.A., age, and educational level.

Methodology

Consent for administering the Feminism II Scale was obtained from each dental hygiene student at Old Dominion University and the University of Minnesota (see

Appendix A). Standardized oral instructions were given to each class of dental hygiene students before administering the Feminism II Scale (see Appendix D). Directions encouraged the subjects to answer the questions accurately and honestly. Anonymity of subjects' names was maintained throughout the study. Subjects were free to ask any questions and received a postcard with the permanent address of the researcher so that they might request the results of the study.

To control extraneous variables, the same researcher administered the scale to each class of dental hygiene students.

Protection of Subjects

1. Subject Population--The research investigation required the utilization of all undergraduate dental hygiene students at Old Dominion University, Norfolk, Virginia, and the University of Minnesota, Minneapolis, Minnesota. This population was selected because of the convenience and availability to the researcher.

2. Potential Risks--The descriptive procedure involved no risk to the subjects. Each subject was requested to complete a basic information questionnaire and attitudinal questionnaire. All responses remained confidential and the data were reported in group form only.

3. Consent Procedures--Following an orientation to the study, the subjects were requested to sign a consent form (see Appendix B). Subject participation was voluntary.

4. Potential Benefits--The data gathered in this study provide information on dental hygiene students' perception of themselves and the "typical dental hygienist" in regard to feminism. This information proves beneficial in defining characteristics of individuals attracted to the dental hygiene profession, selecting individuals for admittance into dental hygiene programs and modifying dental hygiene curricula to instill in students the basic principles of feminism.

5. Risk-Benefit Ratio--When no risk is involved, the outcome of the study can only be beneficial.

Instrumentation

The Feminism II Scale developed by Dempewolff[11] was used to assess dental hygiene students' perceptions of themselves and the "typical dental hygienist" in regard to feminism. The scale consists of 56 items, in two short forms with 28 items each. The parallel form reliability of the two short forms was established in a follow-up study by Dempewolff as $r=0.95$, indicating that the short forms are appropriate for use as equivalent measures of feminist attitudes.[12] Concurrent validity of the Feminism II Scale was confirmed by Dempewolff.[11] The mean Feminism II score for supporters of the feminist movement was 41.16 above the mean score for opposers of the feminist movement. Dempewolff found the mean score for supporters was 103.575; for opposers, 82.315.[11] This differentiation indicates

little overlap of scores and confirms that people differ in the expected manner on attitudes toward the feminist movement.[12] The Feminism II Scale covers political, intellectual, and economic spheres and focuses on questions of competence, privileges, responsibilities, and leadership for women. Respondents indicate agreement with each item as "agree very much," "agree a little," "disagree a little," or "disagree very much." Items are scored on a four-point scale with a high score of 4 indicating support of the aim of the feminist movement and a low score of 1 indicating opposition to this aim. However, the subject cannot check all ones or fours because questions are phrased in alternating fashion so that a score of four at times indicates an agree answer, at other times a disagree answer. Subjects did not know how the questions were rated. The maximum score attainable on each form is 112; the minimal score, 28. The higher the score, the stronger the individual's identification with the aims of the feminist movement. All data were intervally scaled.

Statistical Treatment

Data gathered on perceptions of "self" and the "typical dental hygienist" was analyzed using 3x3x3 factorial repeated measures analysis of variance. The repeated measures analysis of variance allowed interaction among educational level, Q.P.A., and age to be tested for statistically significant effects. In addition, the

repeated measures aspect of the design, that is, (1) perception of self and (2) perception of the "typical dental hygienist," was used to determine statistically:

1. Whether students' perception of themselves and the "typical dental hygienist" are the same, averaged across age, educational level, and Q.P.A.

2. Whether differences in students' perceptions of themselves and the "typical dental hygienist" are the same for the various age groups (interaction between attitudes and age).

3. Whether differences in students' perceptions of themselves and the "typical dental hygienist" are the same for the various Q.P.A. groups (interaction between attitudes and Q.P.A.).

4. Whether differences in students' perceptions of themselves and the "typical dental hygienist" are the same for the various educational levels (interaction between attitudes and educational level).

Chapter 4

RESULTS AND DISCUSSION

Dempewolff's Feminism II Scale was administered to one hundred ninety-eight first-year, second-year, and post-certificate dental hygiene students at Old Dominion University, Norfolk, Virginia, and the University of Minnesota, Minneapolis, Minnesota. Educational level, age, and qualitative grade point average (Q.P.A.) were determined from the basic information questionnaire (see Appendix C).

Repeated measures analysis of variance was employed to determine the main and interaction effects of the assigned independent variables, educational level, age, and qualitative grade point average, on the dependent variable, dental hygiene students' scores for "self" and the "typical dental hygienist." Since the subject groupings (educational level, Q.P.A., and age) and the two types of scores ("self," "typical dental hygienist") were fixed and the subjects were random, the model was mixed and consequently two different error terms were needed to test for significant differences. All comparisons were made at the 0.05 level of significance. The computerized Biomedical Computer Program (BMD) was used for data analysis.

Results

Data were analyzed to determine whether a statistically significant difference existed between students' perception of themselves and students' perception of the "typical dental hygienist." Analysis revealed that no statistically significant difference existed ($F=1.50$, $df=26$, $p=0.156$) (see Appendix J).

Data were examined to determine whether in students' perceptions of themselves there were statistically significant differences overall for age groups, Q.P.A. groups, and educational levels (main effects and interaction together). Analysis revealed that no statistically significant difference existed ($F=1.33$, $df=171$, $p=0.10$) (see Appendix J, part A).

Data were examined to determine whether in students' perceptions of the "typical dental hygienist" there are statistically significant differences overall for age groups, Q.P.A. groups, and educational levels (main effects and interaction together). Analysis revealed that no statistically significant difference existed ($F=0.5955$, $df=171$, $p=0.5490$) (see Appendix J, part B).

Data were also examined to determine whether a statistically significant difference existed in scores for "self" between educational levels of dental hygiene students averaged over age and Q.P.A. Analysis revealed that no statistically significant difference existed ($F=0.54$, $df=2,171$, $p>0.5$) (see Appendix J, part A).

Data were also examined to determine whether a statistically significant difference existed in scores for "typical dental hygienist" between educational levels of dental hygiene students averaged over age and Q.P.A. Analysis revealed that no statistically significant difference existed ($F=0.58$, $df=2,171$, $p>0.5$) (see Appendix J, Part B).

Although no statistically significant differences in dental hygiene students' perception of themselves and the "typical dental hygienist" were found, mean scores for "self" and "typical dental hygienist" revealed trends of interest. Overall, perceptions of "self" are most feminist among students with Q.P.A.'s between 3.00-3.59. Perceptions of "self" were the least feminist among students, ages 23-29, with Q.P.A.'s between 3.60 and 4.00. Among first-year students, ages 18-22, the higher the Q.P.A. the more feminist the "typical dental hygienist" was perceived to be. First-year students, ages 23-29, with Q.P.A.'s between 3.00-3.59 perceived the typical dental hygienist as being more feminist than did the other two Q.P.A. groups.

Second-year students, ages 18-22, with Q.P.A.'s between 3.00-3.59, perceived the "typical dental hygienist" as being more feminist than did the other two Q.P.A. groups. Among second-year students, ages 23-29, the higher the Q.P.A. the more feminist the "typical dental hygienist" was perceived to be.

Post-certificate students', ages 18-22, perceptions of the "typical dental hygienist" were approximately the same for all Q.P.A. groups. Among post-certificate students, ages 23-29, the higher the Q.P.A. the less feminist the "typical dental hygienist" was perceived to be.

Mean scores for "self" and "typical dental hygienist" are graphically presented in Appendices E through H. In addition, cell frequencies for age, educational level and Q.P.A. are presented in Appendix I.

Discussion

The results of the analysis failed to reject the null hypothesis that there is no statistically significant difference at the 0.05 level between dental hygiene students' perception of themselves and students' perception of the "typical dental hygienist." This finding suggests that dental hygiene students perceive themselves and the "typical dental hygienist" as having approximately the same attitudes toward feminism. When this population of dental hygiene students was compared to Dempewolff's "Known" study group, it was found that the dental hygiene students had a mean score of 83.5, which would indicate that the students are inclined toward opposition of the feminist movement (mean score for supporters = 103.575; for opposers, 82.315).[12]

The overall mean score for dental hygiene students might suggest a picture of dental hygiene students

as "conventionally-oriented young women, much more heavily interested in feminine life goals than in career pursuits and reluctant to make more than incidental concessions to professional involvement."[12] If dental hygiene students perceive the "typical dental hygienist" in this same light, it is easy to see why dental hygiene's progress toward professional independence is slow. The fact that dental hygiene is moving slowly toward independence might be a result of dental hygienists believing that they should be in a subordinate/superordinate relationship with the dentist and that they are of lesser status. A study by Tipton[40] revealed that women with traditional attitudes toward women scored higher on stereotypically female occupational scales. Dental hygiene students in this study may have chosen to enter dental hygiene because it is a traditionally female occupation. Some of the people responsible for the perpetuation of sex stereotyping and the low aspirations of women are, in fact, women.[17] Attitude change must first come from within the dental hygiene profession if dental hygienists are to be potential agents of their own change. The dental hygiene profession cannot be divided within itself; dental hygienists must collectively strive for professional autonomy. Numbers of individuals are obviously useful both for building a base of support for change and for providing a large pool of talent from which to draw leaders. Dental hygienists must realize: (1) the potential they have as professionals, and (2) that only

through collective action and commitment to dental hygiene will professional independence be achieved.

Findings from the analysis failed to reject the null hypotheses that in students' perceptions of: (1) themselves, and (2) the typical dental hygienist there are no significant differences overall, at the 0.05 level, for age groups, Q.P.A. groups, and educational levels. These results do not agree with past research indicating that persons with a high grade point average, persons who are older, and persons at a higher educational level are thought to be more independent, self-directed, and goal oriented.[43] The results, however, might have been affected by the limitations of this study. The sample population was composed mainly of young students. Dental hygiene graduate students might have revealed different findings. Larger populations and longitudinal studies might yield more definitive information about the relationship between dental hygiene students' age, Q.P.A., and educational level and their feminist attitudes.

Findings from the analysis failed to reject the null hypotheses that there is no statistically significant difference at the 0.05 level among first-year, second-year, and post-certificate dental hygiene students' perceptions of themselves and the "typical dental hygienist" in regard to feminism. Although perceptions of "self" and the "typical dental hygienist" do not appear to be related to educational level, additional studies examining feminist

attitudes in different dental hygiene student populations and employing alternate feminism instruments are recommended to determine whether the results of this study can be validated.

The findings of this investigation suggest that dental hygiene curricula studied are not affecting students' attitudes toward feminism. A reason for this might be the absence of a feminist perspective in dental hygiene educators and practitioners. If dental hygiene is to develop a more feminist position, dental hygiene educators might need to incorporate women's studies courses into dental hygiene curricula in order that an awareness of the history of women, sex-role socialization, and gender identity may develop. Consciousness raising is a strategy that involves seeking out the knowledge and strengths people have, and building on them, rather than holding people up against a predetermined standard by which they must measure themselves.[17] Consciousness raising for dental hygiene students might be needed to develop students' self concepts as women and as oral health professionals.

A consciousness about "power as women" and the potential of "woman power" in the dental hygiene profession needs to be developed. Dental hygiene students might need to be taught that only through collective action will dental hygiene gain professional autonomy and free itself from the controlling dominance of the dental profession. Participation in the Student American Dental Hygiene Association

might provide students with an awareness that their professional organization is the best means for collective action. Student Association meetings provide excellent opportunities for feminist speakers and might be a way to develop students' consciousness about women when women's studies courses cannot be incorporated in curricula. The fact that dental hygienists must be the agents of active change in developing an egalitarian relationship where power is shared between the dental hygiene and dental professions needs to be instilled in dental hygiene students if this type of relationship is to be achieved.

Implied from the aforementioned results is that dental hygiene educators might need to assess their own feminist attitudes.

> In education, the dental hygiene educator provides direction for the student and has some degree of control over the education process and the students being educated in the setting.[15,24]

Since the results of this study indicate nonsupport of feminist aims in students, dental hygiene educators may not ascribe to feminist aims themselves, and thereby are unable to serve as effective role models. Perhaps dental hygiene educators, while accepting intellectually the ideals of career commitment, self-direction, and professional independence, behave according to a more traditional patterning. If dental hygiene professes one set of values and behaves according to another, dental hygiene educators are premature in their efforts to prepare

students for professional independence. Values which are in the affective domain are the most difficult to teach, yet must be the concern of dental hygiene educators. Dental hygiene students learn how to be dental hygienists not only from the curriculum content, but also from observing the behavior of the dental hygiene educators--their role models. Students become the kind of dental hygienists their teachers are.[7] The way educators feel about themselves as professionals, about their appropriate relationship to dentists, will continue to bear significantly on the direction the profession will take in the future.

While every effort was made to use appropriate sampling techniques, it is important to note certain limitations of this study. First, the Feminism II Scale was used as a measure of feminism in dental hygiene students; alternate instruments might have yielded dissimilar results. Second, several mean scores are based on a very small sample size. Mean scores for post-certificate students over 30 are based on four or less persons (see Appendix I). Future research with larger sample populations is needed to enhance the generalizations of these findings. Third, different dental hygiene student groups might have rendered a different outcome. In addition, comparison of the Feminism II scores from Old Dominion University and the University of Minnesota might have revealed significant differences. Future investigations testing differences between dental hygiene schools are advisable.

Chapter 5

SUMMARY AND CONCLUSIONS

Few, if any, investigations have been concerned with feminism and dental hygiene students. The instillment of feminist attitudes in dental hygiene students might be necessary for dental hygiene to gain professional independence and power.

One hundred ninety-eight subjects appropriately completed the Feminism II Scale and the basic information questionnaire designed to determine students' age, Q.P.A., and educational level. Data were organized according to a 3x3x3 factorial research design. Repeated measures analysis of variance was used to determine the main and interaction effects of the assigned independent variables (age, Q.P.A., and educational level) on the dependent variable (dental hygiene students' Feminism II scores).

The results obtained in this study failed to reject the null hypothesis that there is no statistically significant difference at the 0.05 level between students' perceptions of themselves and students' perception of the "typical dental hygienist" as measured by the Feminism II Scale. The results of this investigation failed to reject the null hypothesis that in students' perception of themselves there are no statistically significant

differences overall, at the 0.05 level, for various age groups, Q.P.A. groups, and educational levels as measured by the Feminism II Scale. The results of the study failed to reject the null hypothesis that in students' perception of the "typical dental hygienist" there are no statistically significant differences overall, at the 0.05 level, for various age groups, Q.P.A. groups, and educational levels as measured by the Feminism II Scale. The results obtained in this study failed to reject the null hypothesis that there is no statistically significant difference at the 0.05 level in scores for "self" between first-year, second-year, and post-certificate dental hygiene students as measured by the Feminism II Scale. The results of this investigation failed to reject the null hypothesis that there is no statistically significant difference at the 0.05 level in scores for "typical dental hygienist" between first-year, second-year, and post-certificate dental hygiene students as measured by the Feminism II Scale.

Conclusions from this study include that: (1) female dental hygiene students perceive themselves and the "typical dental hygienist" as having approximately the same attitudes toward feminism and (2) female dental hygiene students are inclined toward opposition of the feminist movement. Implications from this study include that: (1) dental hygiene curricula are not enhancing dental hygiene students' feminist attitudes, (2) present dental hygiene curricula need to incorporate women's studies

courses and consciousness raising into their curricula, and (3) dental hygiene educators need to assess their own feminist attitudes in order to serve as effective role models.

Considering the results and limitations of this investigation, the following recommendations for future study are made:

1. Replication of this study using different dental hygiene student populations, different educational settings, and different feminism data-collection instruments.

2. Conduction of a longitudinal study assessing feminist attitude changes in dental hygiene students prior to and subsequent to dental hygiene education.

3. Conduction of experimental studies measuring the short-term and long-term effects of women's studies courses on dental hygiene students.

4. Conduction of a correlational study examining the relationship between dental hygiene student feminism scores, Dental Hygiene Aptitude Test scores, Scholastic Achievement Test and American College Test scores.

5. Conduction of a study comparing dental hygiene student feminism scores with the feminism scores of dental hygiene educators, practitioners and female dental students.

6. Conduction of an investigation exploring dental hygiene students' attitudes toward feminism using a larger sample population.

7. Conduction of an investigation comparing dental hygiene student feminism scores with the feminism scores of non-dental hygiene students in typical female majors and atypical female majors.

8. Conduction of an investigation comparing feminism scores of female dental hygiene students with feminism scores of male dental hygiene students.

The results of this research could be considered by dental hygiene educators concerned with planning future dental hygiene curricula. Moreover, the results of this research could be considered by dental hygienists concerned with gaining professional independence and power and establishing an egalitarian relationship between the dentist and dental hygienist.

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APPENDIX A

FEMINISM II SCALE

Part I

Circle the letter(s) which most closely indicates how you think the "typical dental hygienist would answer each statement:

AA = Agree very much
A = Agree a little
D = Disagree a little
DD = Disagree very much

AA A D DD 1. Women should feel free to compete with men in every sphere of economic activity.

AA A D DD 2. It is better to have a man as a boss or supervisor than a woman.

AA A D DD 3. Management of property and income, acquired by either husband or wife, should rest with both husband and wife.

AA A D DD 4. If a woman with an infant continues to work outside the home, she is neglecting her maternal duty.

AA A D DD 5. A woman could be just as competent as a man in a high political office.

AA A D DD 6. A woman should take her husband's last name at marriage.

AA A D DD 7. Both husband and wife should be equally responsible for the care of young children.

AA A D DD 8. Women should not compete in football or baseball, even against other women.

AA A D DD 9. Sex is no indication of fitness or lack of fitness to enter any type of occupation.

AA A D DD 10. The intellectual leadership of a community should be mostly in the hands of men.

AA A D DD 11. Society should be prepared to provide day care centers so any woman who wants to hold a job can do so.

AA A D DD 12. It is only fair for a school which offers professional training to limit the number of female students in favor of males.

AA A D DD 13. Objections which one might have to the use of obscene language should bear no relation to the sex of the speaker.

AA A D DD 14. Men should usually help a woman with her coat and open the door for her.

AA A D DD 15. Men should have an equal chance for custody of children in a divorce.

AA A D DD 16. It should usually be the duty of the husband to support his wife and family.

AA A D DD 17. Women workers have abilities equal to those of men workers for most jobs.

AA A D DD 18. Women should be happier in the long run if they could adjust to their role as housewives.

AA A D DD 19. Women can control their emotions enough to be successful in any occupation.

AA A D DD 20. Police duty is a job that should usually be done by men.

AA A D DD 21. A woman should have the same freedom and the same restrictions as a man.

AA A D DD 22. The husband should usually initiate sexual relations with his wife.

AA A D DD 23. It is natural if a woman's career is as important to her as husband and children.

AA A D DD 24. For her own safety, parents should keep a daughter under closer supervision than a son.

AA A D DD 25. Women should feel free to enter occupations requiring aggressiveness rather than remaining in jobs calling for compliance.

AA A D DD 26. A woman should almost always let her date pay for whatever they do together.

AA A D DD 27. Women should ask men out for dates if they feel like it.

AA A D DD 28. Women should accept the intellectual limitations of their sex.

Part II

Circle the letter(s) which most closely indicates your feeling about each statement:

AA = Agree very much
A = Agree a little
D = Disagree a little
DD = Disagree very much

AA A D DD 1. The influx of women into the business world, in direct competition with men, should be discouraged.

AA A D DD 2. The sex of a boss or supervisor is unimportant provided he or she is competent.

AA A D DD 3. The husband should be favored by law in the disposal of family property or income, provided he is the sole wage earner.

AA A D DD 4. Married women with very young children should work outside the home, if they wish.

AA A D DD 5. In general, women should stay out of political positions.

AA A D DD 6. A woman should be able to officially retain her own last name after marriage.

AA A D DD 7. Parental responsibility for care of young children should usually be in the hands of the wife.

AA A D DD 8. A woman should be allowed to play major league baseball if she can compete.

AA A D DD 9. Because of their physical limitations, women should be advised to choose less strenuous types of occupations.

AA A D DD 10. Women should take more responsibility for solving the intellectual and social problems of the day.

AA A D DD 11. Society should not be expected to provide day care centers for working women.

AA A D DD 12. There should be many more women in graduate school even if it means keeping some men out.

AA A D DD 13. The use of obscene language is more unbecoming for a woman than for a man.

AA A D DD 14. When on a date, the woman should usually open doors by herself rather than letting the man do it for her.

AA A D DD 15. A woman should usually have custody of the children in a divorce.

AA A D DD 16. Husband and wife should share responsibility for economic support of themselves and their children.

AA A D DD 17. Generally speaking, men are more fit to run business and industrial enterprises than are women.

AA A D DD 18. Many women need fulfillment which they don't obtain from being a wife and mother.

AA A D DD 19. Many women are too sensitive to be good at certain occupations.

AA A D DD 20. Every police department should have policewomen with equal authority and responsibility to that of the men of the force.

AA A D DD 21. A woman should not expect to go the same places or to have the same freedom of action as a man.

AA A D DD 22. A wife should take the lead and suggest sexual intercourse if she wishes it.

AA A D DD 23. The needs of a family should come before a woman's personal ambitions.

AA A D DD 24. A daughter in a family should have the same privileges as a son.

AA A D DD 25. It is foolish for a woman to enter certain occupations that detract from her femininity.

AA A D DD 26. A woman earning as much as her escort should bear equally the expense of common entertainment.

AA A D DD 27. The initiative in courtship should usually come from the man.

AA A D DD 28. Women have equal intelligence with men.

Appendix B

CONSENT TO PARTICIPATE FORM

You are invited to participate in a study of dental hygiene students' attitudes toward women, themselves, and the "typical dental hygienist." I hope to learn how dental hygiene students perceive themselves, women, and the "typical dental hygienist." You were selected as a possible participant in this study because of your educational setting and the accessibility to the researcher.

If you decide to participate, I will administer to you an attitudinal scale which has been designed to survey your concept of women, the typical dental hygienist and yourselves. The estimated time required to complete this scale is thirty minutes. There are no risks involved in this study. It is hoped that you will benefit from knowledge of your colleagues' views of themselves, women, and the "typical dental hygienist."

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission. In any written reports or publications, no one will be identified or identifiable and only aggregate data will be presented.

Your decision whether or not to participate will not prejudice your future relations with the University of Minnesota/ Old Dominion University (whichever is applicable). If you decide to participate, you are free to discontinue participation at any time without prejudice.

If you have any questions, please ask me. If you have any additional questions later I, Christine Berg (804) 489-2662, will be happy to answer them.

You are making a decision whether or not to participate. Your signature indicates that you have read the information provided above and have decided to participate. You may withdraw at any time without prejudice after signing this form should you choose to discontinue participation in this study.

_____ _____

Signature Date

_____

Signature of Investigator

Appendix C

BASIC INFORMATION SHEET

1. Age _____
2. Q.P.A. or G.P.A. _____

   Check only one of the below.

3. Year in Dental Hygiene

   _____ First year

   _____ Second year

   _____ Baccalaureate

Appendix D

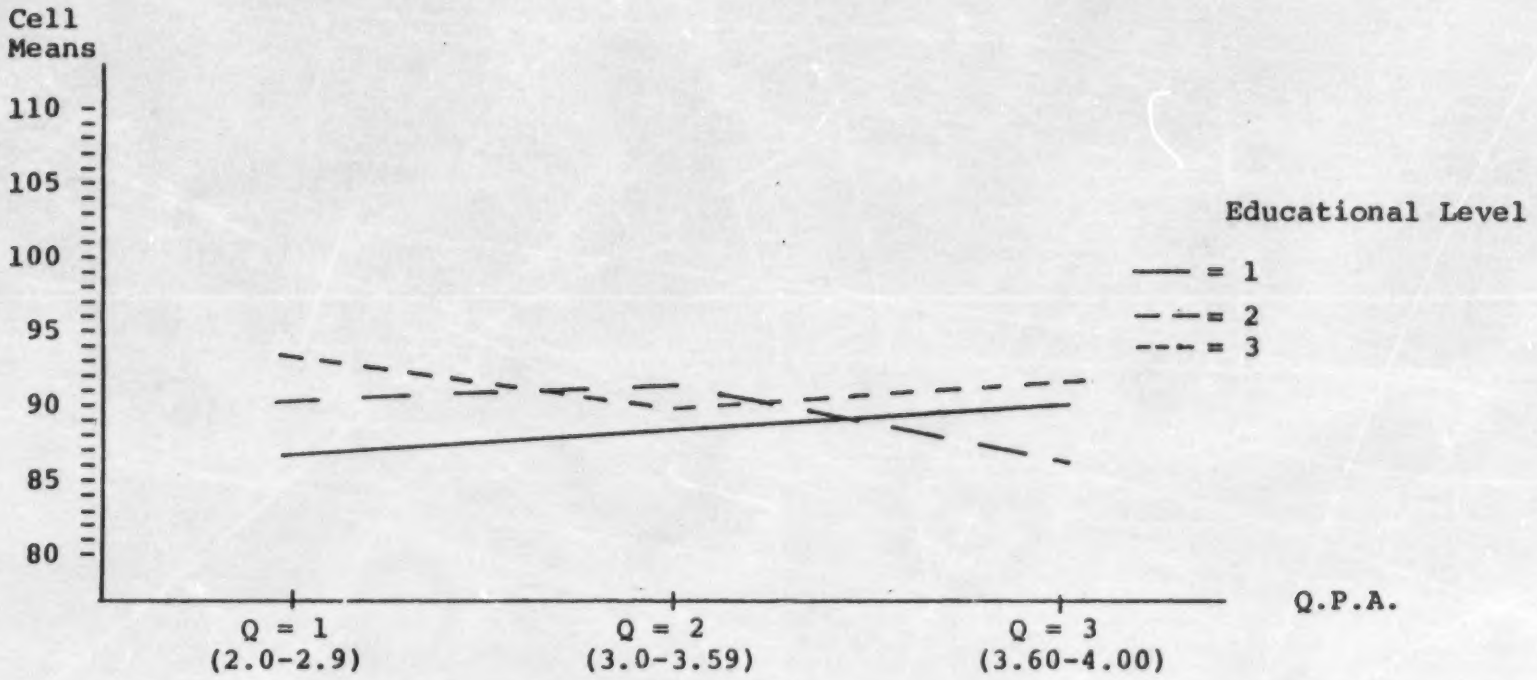
ORAL INSTRUCTIONS

I am interested in learning about your attitudes toward women, yourself, and what you perceive the "typical dental hygienist" to be. Your participation in this study is much appreciated. All data from this questionnaire will be strictly confidential and individual responses will not be shared with anyone. You may withdraw from this experiment at any time without threat of penalty. If you agree to participate in this study please sign the consent form. If you do not choose to participate in the study please do not complete any parts of the questionnaire. The results of this study will be available to you upon request. If you are interested in the results of this study please obtain a postcard from me when you have completed the questionnaire. Mail the postcard to me with your name and address on the back. The results will be sent to you in August when the study is completed.

APPENDIX E

LINE GRAPH OF FEMINISM II SCALE MEAN SCORES FOR "TYPICAL DENTAL HYGIENIST" AMONG DENTAL HYGIENE STUDENTS, AGES 18-22, BASED ON Q.P.A. AND EDUCATIONAL LEVEL

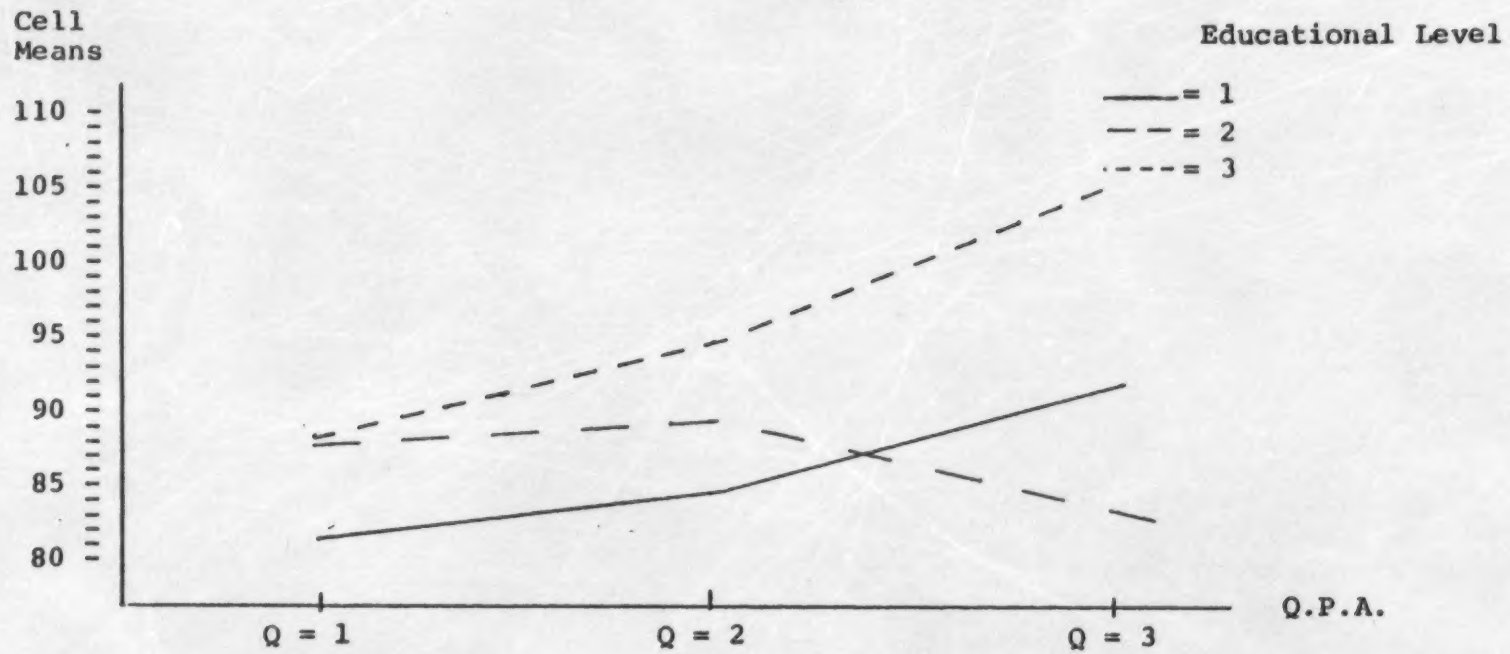
Age 1 Part 1 "Typical Dental Hygienist"



APPENDIX F

LINE GRAPH OF FEMINISM II SCALE MEAN SCORES FOR "SELF" AMONG DENTAL HYGIENE STUDENTS, AGES 18-22, BASED ON Q.P.A. AND EDUCATIONAL LEVEL

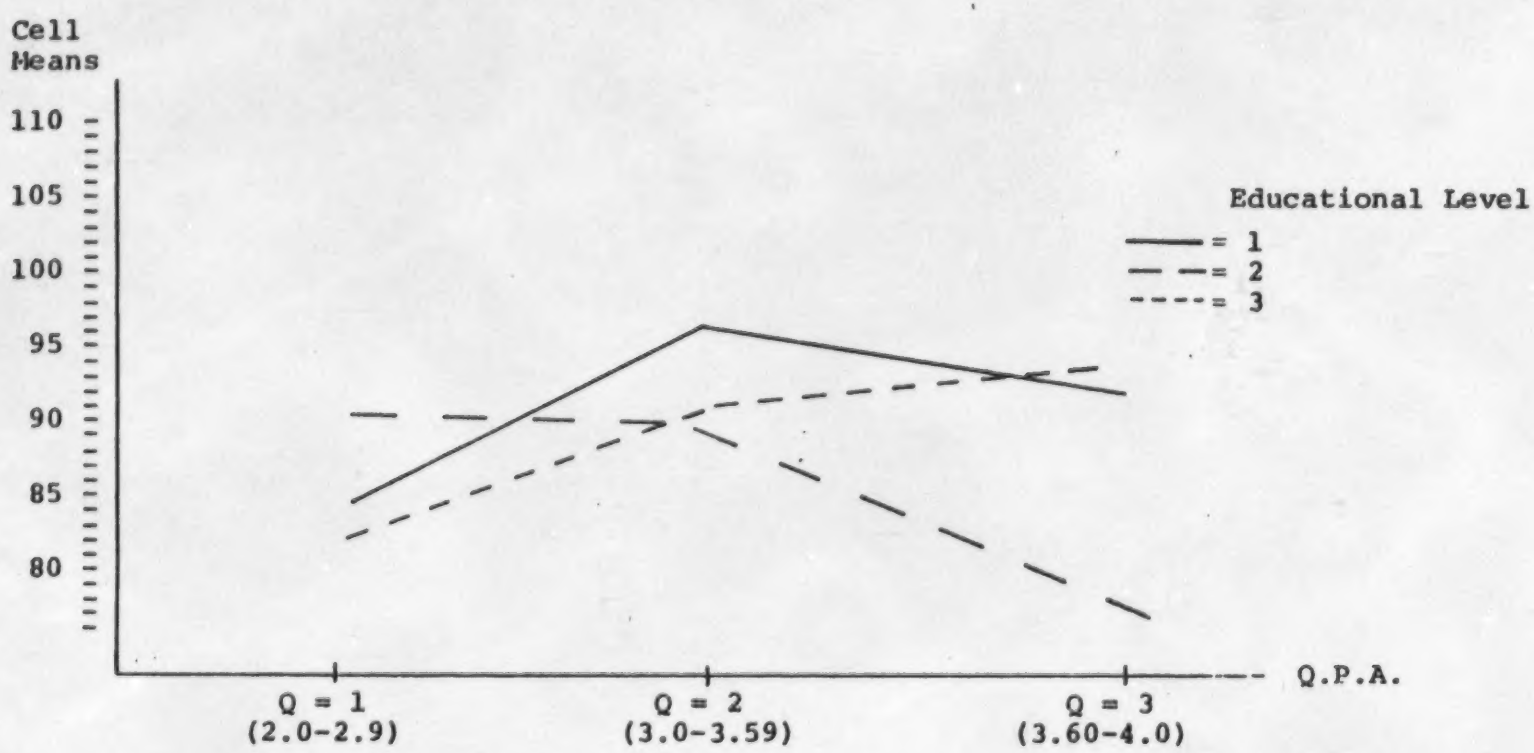
Age 1 (18-22) Part 2 "Self"



APPENDIX G

LINE GRAPH OF FEMINISM II SCALE MEAN SCORES FOR "TYPICAL DENTAL HYGIENIST" AMONG DENTAL HYGIENE STUDENTS, AGES 23-29, BASED ON Q.P.A. AND EDUCATIONAL LEVEL

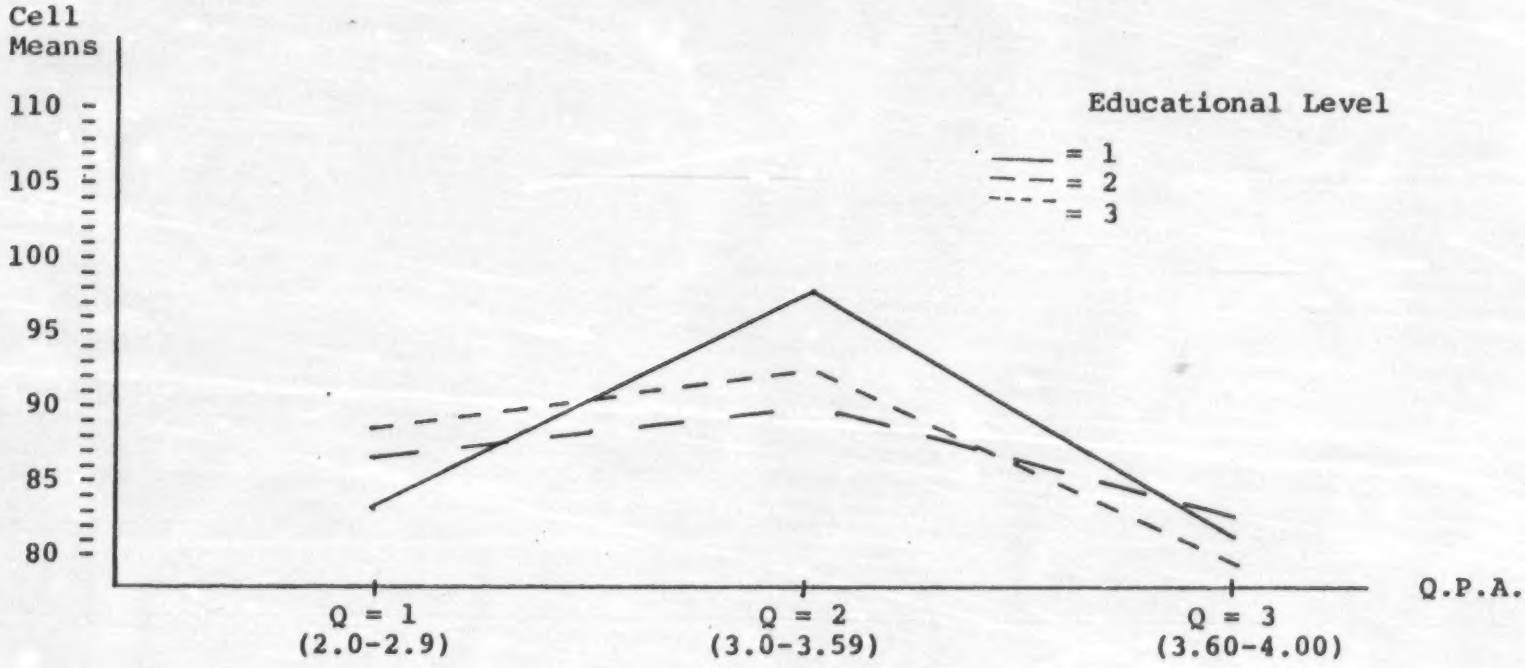
Age 2 (23-29) Part 1 "Typical Dental Hygienist"



APPENDIX H

LINE GRAPH OF FEMINISM II SCALE MEAN SCORES FOR "SELF" AMONG DENTAL HYGIENE STUDENTS, AGES 23-29, BASED ON Q.P.A. AND EDUCATIONAL LEVEL

Age 2 Part 2 "Self"



APPENDIX I

CELL FREQUENCIES FOR AGE, Q.P.A., AND EDUCATIONAL LEVEL

Age		Educational Level	Q.P.A. 1	2	3
18-22	1	1	21	29	8
	1	2	27	45	8
	1	3	3	7	2
23-29	2	1	1	4	1
	2	2	3	12	4
	2	3	2	7	1
≥30	3	1	1	1	1
	3	2	1	4	1
	3	3	1	2	1

APPENDIX J

REPEATED MEASURES ANALYSIS OF VARIANCE AMONG FEMINISM II SCORES

Source of Variation	Sum of Squares*	Degrees of Freedom	Mean Square	F	p
Groups (Age, Educational level, and Q.P.A. interactions)	5260.5366	26	202.33	1.50	>0.156
Scores (score 1 = typical dental hygienist, score 2 = self)	84.5156	1	84.5156	2.03	>0.5
Groups x Scores	305.8186	26	11.7622	0.28	>0.5
Subjects [Error for Groups]	23035.2141	171	134.21		
Person (Groups x Scores) [Error for Groups x Scores, Error for Scores]	7120.56439	171	41.64		
Part A--Score 2--Self					
Groups	4675.1181	26	179.8122	1.33	>0.10
Educational Level	145.38	2	72.69	0.54	>0.5
Error	23035.2141	171	134.71		
Part B--Score 1--Typical Dental Hygienist					
Groups	2086.0377	26	80.2322	0.5955	>0.5490
Educational Level	155.98	2	77.99	0.58	>0.5
Error	23035.2141	171	134.71		

*All sums of squares for groups, scores, and groups x scores are adjusted for all other effects.